

ABSTRACT OF THE DISCLOSURE

A monolithic mirror assembly is disclosed that is manufactured from a silicon on insulator (SOI) substrate comprising two silicon layers separated by an insulator material. One layer of silicon and the insulator layer are partially etched, thus exposing the underlying second layer of silicon which functions as the reflective surface of the mirror. A first layer of electrodes is disposed on the exposed portion of the insulator area above the reflective surface of the mirror. The mirror is directly mounted on a second substrate comprising a second layer of electrodes. The first and second layers of electrodes are used to variably deform the shape of the mirror to compensate for wave front errors in an optical signal.